

**Book Review and Summary: HOW MUCH SHOULD A PERSON
CONSUME?**

RAMACHANDRA GUHA

INTRODUCTION

- The book 'How Much Should A Person Consume?' is an academic history of environmental movements and environmentalism. It contains neither historical events nor scientific analyses of the evolving global climate or the surrounding environment. Rather, the book organizes and dissects the emerging theories on nature and human interactions, within the framework of various individuals' biographical accounts that have properly articulated and influenced such ideas.
- Guha asserts that the issue of environmental degradation has historically been looked at by environmentalists and ecologists through an individualistic perspective. In such a system the social aspects and subjective conditions are generally disregarded. Guha's core philosophy on social ecology contains simple yet expansive set of arguments on how to guide environmental activism in order to generate more sustainable solutions worldwide that can be applied to each social context, towards environmental issues.
- The book is a reflection on Guha's commitment towards:-
 - 1) Historical study of the diverse environmental and social ties.
 - 2) Humanitarian public policy and environmentalism.
 - 3) Diverse international representation on varied environmental movements .
 - 4) Expressing relationships with individuals that influenced his view of global environmentalism.

CHAPTER 1

HISTORY *SANS* CHAUVINISM

THEMES IN THE TEXT

- Guha begins by stating Lester Thurow and Thurow's claims about environmentalism. Thurow claims that the only developed world created environmentalism to express a disciplinary chauvinism. Guha then brings in the Chipko movement to counter Thurow's claims. Guha called the expression of the sloganeering in the Himalayan forest as cultural chauvinism. According to Guha this varied chauvinistic behavior of people has degraded environment as a whole. He says that the book is an attempt to understand these environment degrading chauvinistic behaviors and also as personal attempt to unlearn it.
- The chapter then moves towards Guha's introduction to the field of environmentalism. He attended a lecture by Jayanta Bandhopadhyaya who encouraged him to work on "the sociology of the Chipko movement" as his dissertation. Guha then travelled back to Dehradun in the summer and was invited by Chandi Prasad Bhatt, one of the leaders of the Chipko movement to his home town, Gopeshwar upon Guha's request. After meeting Chandi Prasad, Guha was convinced to work on the topic Jayanta suggested. His dissertation was to be an ethnographic study of Chipko Movement.

- Most of the work was done in the National Archives and the UP State Archives in Lucknow. He says that his academic career has been a series of accidents which led him to environmentalism. He shifted from the Marxist angle of his dissertation due to the conversation he had with this friend and historian Basudev 'Robi' Chatterji. Guha was no longer a Marxist historian.
- He then travelled to Yale where he was introduced to the field of American environment history. Before leaving, he wrote a critique of 'Deep Ecology', by Bill Devall and George Sessions, which was published two years later in Environmental Ethics under the title 'Radical American Environmentalism and Wilderness Preservation: A Third World Critique'.
- He joined the Centre for Ecological Sciences (CES) of the Institute of Science in Bangalore. He met Madhav Gadgil there, who was the chair of CES. Gadgil ignited his chauvinism and introduced him to the Spanish Economist Juan Martinez-Alier. Guha claims that Martinez-Alier was his introduction to European intellectuals. He says that the book aims to unite and reflect the various themes presented in the book as an analysis of popular social movements whilst touching upon the environmental philosophies and practices as well as policies.

CHAPTER 2

THE INDIAN ROAD TO SUSTAINABILITY

THEMES IN THE TEXT

- The chapter looks into the two waves of Indian environmentalism. The first wave started with the early twentieth century till World War 2. Two intellectual communities actively took part in the making: thinkers close to Indian National Movement and dissident scientists. The second wave created a sophisticated yet engaging discourse around sustainable development.
- Guha moves on to shed light on some of the forgotten pioneers of Indian environmentalism. First he talks about Patrick Geddes who worked extensively in theory and practice on town planning. Geddes had a historical and ecological approach to studying the rise of modern cities and its impact on the environment. He employed two concepts : one being diagnostic survey- an intensive walking tour to acquaint ourselves with the development of the cities and the second being conservative surgery- the practice of gentle improvements with minimum disruptions. Geddes was very interested in studying the cities and improving the habitat . He firmly believed in Eutopia and not Utopia. He was impressed with the planning of the households but despised the modern road planning with big dusty roads for automobiles. He strongly recommended the maintenance of tanks and reservoirs. Geddes believed in a participatory approach to town planning along with an ecological stand. He sought to bring together the urban and the countryside living via tree planting and water conservation which provides 'the return to the nature' aspect to the plan.

- The second pioneer Guha tells about is Radha Kumud Mukherjee, who was a well-known and widely published historian of ancient India. Mukherjee spoke of an emerging discipline called 'social ecology', which combines the skill set of a sociologist and an ecologist. Her research on the relations between human social groups and the biophysical world they shared. He criticised the crimes against natural vegetation in Northern India, done by humans. Mukherjee emphasised on the need to imitate nature's methods and the need of applied ecology being the only guarantee of a permanent civilisation. Guha expresses his disappointment over Mukherjee's values not being implemented to reach and ally with natural forces.
- The final pioneer Guha mentions is the Gandhian Economist K. Kumarappa. He was put in charge of Gandhi's vision of reconstructing villages. Kumarappa, like a true Gandhian, worked towards the betterment of the peasants. His work mostly runs around the theme of economical usage of resources within the rural economy. He was strongly in favour of using rights of as manure, thereby simultaneously converting human waste into wealth and overcoming the prohibition of caste. He criticised the British government for poor maintenance of irrigation tanks and urged for groundwater conservation. He was convinced with resource conservation and being a Gandhian, preferred small industries. After Gandhi's death and India's independence, Acharya Vinoba Bhave was appointed to carry out the Gandhian will and future for rural development.
- Kumarappa repeatedly told him off and asked him to be wary of his actions but Bhave, being a spiritual person, disbanded all committees, thus distorting the movement. He soon started working with S.K. Dey, who was appointed the Minister of Community Development. Kumarappa heavily criticised the ecological unwisdom of what passed rural development.
- Guha expresses his disappointment over the rejection of brilliant ideas by thinkers like Kumarappa and Mukherjee by the political system. The government initiated Project Tiger in April 1973, with the WWF and other international organisations to save the heavily declining population of tigers across the country.

COMPARATIVES MADE BY GUHA

- Mostly the disputes are over resources owned by the state and the methods of resistance have usually been traditional. Women have played a big role in the environmental movements. Guha links this engagement with the closeness of Hindu women to nature than their Christian sisters. Guha celebrates the fact that women such as Gauri Devi and Medha Patkar have actively been taking part in the environmental movements.
- Guha then moves on to comparing the environmental movements in India to that of North America. According to Guha, movements in North America have a post-materialistic or a post-industrialist essence in them. Meanwhile Indian movements are largely based on survival and livelihood and are mainly fought against the unjust usage of natural resources by the State.

- Guha explains the difference in ideologies by using the "Save The Stanislaus" movement led by Dubois and "Narmada Bachao Andolan" led by Medha Patkar. He highlights the fact that the strategies of direct action were superficially similar, but their motives were very different. While Dubois and his colleagues were striving above all to save the essence and beauty of one of the last of the Californian Wilderness, Medha and her colleagues hoped not only to save Narmada but also the thousands of people's lives and livelihoods.
- A new ideal and successful eco-model was set, i.e., the American model, but the environmentalists disagreed and opposed it. Environmentalists overstated their agenda and that was quick to backfire as they were to be blamed for being the obstructions in the way of successful Americanisation of the Indian society.
- Guha paints out the irony in the types of movements carried out in the 1980s v/s now and also the intensification of social inequalities and natural degradation. He highlights the importance of environmental issues and goes on to criticises the political system for neglecting it.

CHAPTER 3

THREE ENVIRONMENTAL UTOPIAS

INTRODUCTION

- Guha, in this book argues that traditionally environmentalists across the world have looked at this hassle of surroundings degradation through an individualistic lens. Social factors and contextual situations are largely unnoticed in this process. Guha buckets the complete breed of environmentalists based totally on their perfect final results scenarios in 3 buckets - agrarian, primitivisms and scientific industrialization.
- There are some perspectives to be considered- The first chapter dealt with the self scrutiny Christians following the indictment of their faith with the aid of Lynn White. Theorists and laymen alike have anxiously looked at environmental responsibility inside their personal tradition. Secondly, in context of USA there is a greater sort of guilt complex involved. In resisting the equation of a greenback signal with their culture, Americans have pointed increasingly towards their system of national parks.
- The third vital impact on the advancement of ecological morals is established in the nature as opposed to culture. When contrasted with tropical ecologies, calm biological systems are initiated and consequently, increasingly meet with abuse in order to suffice utilitarian ends.

THEMES

1) Agrarianism

- As indicated by Guha agrarianism is only the quest for a brilliant mean of stewardship and economical use. The political program of agrarianism is along these lines to oppose the surge of corporate greed and industrialism where they have not yet made advances and need to return to lands. As a social reaction to industrialization, agrarianism has, as a rule summoned the conventions of the way of life.

2) Primitivism

- Primitivism hypothesis of history has inspired really extreme proposition - for models the decrease of human populace by 90 percent to permit the recuperation of wild territories and species threatened with annihilation. The primitive hypothesis of history has is fundamentally of de-improvement a consistent tumble from the common high of hunter gatherer society. He has also told about simplicity of temperate environment is supplemented by their more noteworthy capacity to recuperate from disturbances. The biology of temperate zone has encouraged both the triumph and the love of nature.

PERSONAL CRITIQUE TO THE TEXT

- Guha has likewise, referenced about the shortcoming of the whole discussion has been its thin spotlight on individuals mentalities towards nature. Likewise he connected to social setting so as to analyze their biological outcomes. Logical industrialization and wild reasoning are two alternate extremes with one upholding the triumph of nature and the other arguing for an arrival to characteristic procedures. Agrarianism is the arrival to stable, means cultivating pushed by the purported profound biologists.
- Guha accepts that none of these three dreams can be acknowledged in full and hypothesizes that we are on the limit of another period of natural morals with the catchphrases being assorted variety, manageability and value.
- No issues up until now, however the structure squares of morals that Guha uses to develop another vision are not really new and have been abused in the ecological vocabulary. Interestingly, Guha also includes, that Indian tree huggers wish for an agrarian model while their western partners need a primitivism model.

CHAPTER 4

DEMOCRACY IN THE FOREST

THEMES ENGAGED BY GUHA

1) Historical contention over management of forests across the world

- Guha begins by talking about the issue of state forestry, which has always been a matter of conflict between the state and various stakeholders including peasants, pastoralists, livestock producers etc. For example, aboriginals in Australia, who were displaced from the forest lands they lived in. The colonial model of strict state control over forests across all colonies, was often met with violence, with peasants and the indigenous people of that region demanding forest rights.
- However, Guha argues that the global discourse on state forestry overtime, became a more accommodative one. The uncompromising and unyielding stances that had been held previously, now changed, in terms of both sides agreeing to listen to each other, in order to reach some form of consensus in the functioning of forests.
- Guha elucidates on this, by stating how, terms like scientific forestry and rational land management, which were indicators of state control on forests, have been replaced with terms such as joint forest management, indicating the need for collaboration with local stakeholders in those regions, for effective administration of forests across the country.

2) The Colonial perspective on forests- formation of the Indian Forest Department

- Guha begins by talking about the initial period of British control of forests in India, which involved rampant cutting down of forests, for the construction of railways. In order to implement methods of sustained-yield forestry, the colonial government decided to form an Indian forest department. Under the Indian forest department, use of forest lands by rural communities was deemed as a privilege and not a right, and it was argued that all land not under cultivation belonged to the state.
- This brought in dissenting voices, not just from outside, but within the British government as well, with the dissidents arguing that lives of people belonging to rural communities was heavily contingent upon their access to forests. They also argued that rural communities play an important role in the maintenance of forests, for sustaining them. The 1878 forest act that divided forests into three forest classes, also included village forests, for use by rural communities. However, village forests had to be first constituted as reserved forests, after which it would be decided, which reserved forests could become village forests.
- Guha argues that this act was very superficial. Village forests existed only in paper. The clause requiring these forests to be first constituted as reserved forests, made sure in reality, all forests come under control of the state. This naturally, brought greater resistance and disdain from local stakeholders.

3) Rise of dissent against British control of forests

- Guha talks of three contending parties, as leading voices of dissent against control of forests by the Colonial government. The first was the Poona Sarvajanik Sabha, which constantly talked of customary rights that rural communities had over forests. They argued that since rural communities had been nourishing these forests since time immemorial, it was fair for them to be actively involved in the functioning of these forests. This forum advocated for a democratic structure for management of forests, where an incentive structure could be created, such that rural communities would be rewarded for successfully protecting or replenishing forest areas. The second voice of dissent was Verrier Elwin, who spoke from the perspective of adivasis, or the tribal people. He argued that lives of the tribal people were intertwined with forests, and was an active proponent of adivasi rights over use of forests in their daily lives. He was actively involved in ethnography of tribal people in India.
- The third voice of dissent was Mira Behn, who spoke from the perspective of peasants of the central Himalayan region, whose lives were dependent on forest produce. Mira Behn actively spoke against the Colonial government, when the local banj forests were being cut down and replaced with pine forests, for commercially valuable timber. She talked of the importance of banj forests in the lives of local people, as it provided them with valuable resources, including cool springs formed under oak trees due to their high absorption capacity, and was the main source of drinking water for the local people.
- Ramachandra Guha states that these voices of dissent were valuable icons to be cherished, as they ignited resistance from a wider mass, to actively talk against unfair domination by the British in the administration of forests, that impaired and dampened lives of a very large section in society.

4) Role of Dietrich Brandis as a dissident in the British bureaucratic administration of forests in India

- Dietrich Brandis was the first Inspector general of forests in India. The reason why he becomes an important person, as extensively talked about social and political context within which state forestry had to operate in India. While he maintained that the state had an important role to play in the management of forests, he rejected the skepticism of the rest of the bureaucracy in the knowledge of rural communities, and acknowledged indigenous Indian forestry. In his larger vision, alongside the state administration of forests, a parallel administrative system at the grassroots level could be implemented, where a 'village forester' could be appointed, who would take in recommendations and assistance of local people, and an incentive system for rural communities could take place. However, in practicality, these were not implemented, as most of the people involved in forest administration, disagreed with Brandis.
- Guha argues that the reason why Brandis must be acknowledged as an important figure, is because despite him being at the top of the forest administration, he ended up being a dissident in a largely homogeneous bureaucratic structure. Practically, he was marginally better than the rest, as he acknowledged indigenous knowledge of forestry, and wanted them in the management of forests, to some extent, by making use of their knowledge.

5) Rise of forest movements: Case of Garhwal and Kumaon

- Increase in use of forests by the Colonial government for commercial purposes, brought increased dissent and opposition from the public. There were several peasant movements right from the beginning of the 19th century, against state forestry. In 1921, when the Colonial government acquired the entire forests in the Garhwal and Kumaon regions (present day Uttarakhand) and converted them into reserved forests, it brought rampant opposition. This was because the lives of people in these regions were contingent on their access to forests; if their access to these forests would be restricted, it would impair their livelihood. This led to massive protests across the region with immense popular support.
- Govind Ballabh Pant, a fierce critic of Colonial administration of forests, stated that what the British were doing was literally encroachment upon these forests, and were in the process destroying the livelihood of local people. A lot of Indian soldiers for the British army came from these two regions- protests therefore deeply worried the British. This led to British offering a solution, in terms of 'van panchayats' where local people would be actively involved in the administration of forests, and would be provided access to certain blocks of forests. This was the first instance of cooperation between the Colonial state and local people, and was seen as a potential solution. However, this solution was not implemented in other regions.
- Guha acknowledged the role of the 1921 movement in igniting active resistance from various parts, against British administration of forests. This movement was significant as a wide mass across the two regions was involved in the resistance movement, therefore symbolising the significance of popular protests across.

6) Position of Indian forests post-independence

- Guha talks about three phases of nationwide debate on forest policy in India: the first one being the politics of blame, wherein both sides, forest officials and environment activists, actively reject each other, and blame each other for environmental degradation. The second phase is known as the politics of negotiation, where both sides started talks with each other, and mutually decided on concessions to be made on both sides. The third phase is called the politics of collaboration, where both sides take action to benefit each other, for example, village forest protection committees being set up in West Bengal, to preserve access to forests for rural communities.
- Guha also talks of the success of joint forest management in states such as West Bengal, where local people have finally got a say in the administration of forests. However, Guha argues that there are problems when joint forest management as well, since state administration always has a greater say than rural communities in functioning of forests, which means they can always veto against any interest put forth by local people.
- Guha argues the need for another phase, which he terms as politics of partnership, where a more democratic framework must be adopted in the administration of forests. The state must take active steps to adequately listen to the recommendations put by local communities, and their interests must be represented at the administration level, in order to ensure a level-playing field.

Personal Engagement with the Text

- I believe that Ramachandra Guha engages well with all tenets pertaining to nature of indigenous issues relevant to forests across various regions, and the evolution of somewhat of a democratic structure in administration of forests across the country. One of the most important aspects of this text was the way in which resistance was initiated against a tyrannical administration. For any protest/resistance against an establishment to be successful, you need strong voices of dissent to arise, as flag bearers in that protest. This is to say, considering the context at that time, where dissent was easily quashed, for organisations like Poona Sarvajanik Sabha, and individuals like Mira Behn, Jyotirao Phule, Verrier Elwin etc. belonging to different regions, to emerge as leaders of wide protests, itself is remarkable.
- Secondly, I agree with Guha in acknowledging individuals like Dietrich Brandis, and other dissidents in the British bureaucracy. Despite these individuals supporting state forestry, the reason why they were marginally better, and worthy of praise, was because of them advocating for a democratic structure to be created in terms of participation of local people in administration of forests, rejecting those dismissing indigenous knowledge of forests, and advocating for providing local people with some access to forests.
- However, I feel that our critique should be pointed towards status quo, where rural communities still continue to have restricted access to forests, something which they have spent years nourishing. State administration of forests, has the ostensible purpose of ensuring protection to forests and its resources. However, the irony is that there is restriction to entry for local communities, who have nourished these forests since time immemorial; but such restriction does not apply to commercial entities, who are able to get through bureaucracy easily, and clear up forests for sole the purpose of commercial interests and gains. This tells us that there is a need for change in policy, in terms of equity, that is, ensuring equitable enforcement of law for all- which is to say, if access is to be given, it should exist for all stakeholders.

CHAPTER 5

AUTHORITARIANISM IN THE WILD

MOVEMENT FOR WILDLIFE

- Guha initially states the current situation and the growing responsiveness of wildlife conservation. He remonstrates the five major groups fuelling the movement for wildlife, namely, the city dwellers and the foreign tourists, ruling elites, international conservation organizations, functionaries of the state forest and wildlife service and the biologists, with their specified motives.
- The conservationists stand or position with regards to tropical rainforest is against the hunters and farmers living in the forest, who are too short-sighted and unaware, and stand as the enemy of the wild. Conservationists see these communities as the cause and reason for the destruction of forest and disappearance of species. He goes on, while citing some examples, working as the foundation to the abovementioned circumstance, like, the one of African sanctuary and the Madagascar rainforest.

CONSERVATION BIOLOGISTS

- Guha talks about the motives and motivations of the conservation biologists. He depicted the angle of differences, and the qualities, the biologists inculcate, one of which is their keen interest and propensity in species other than their own, which blinds them while taking decisions and undermining the legit interest of members of their own species. They discern farmers and forest dwellers as an obstacle to the progress of their scientific research. Quoted the samples of the writing of the ecologists, biologists and botanists, he insisted on the essential role of the environmental biologists and ecologists, as the only legitimate leader in the preservation movements.
- The recent policy documents has become more humanistic in values and more economic in substance, as enlisted and claimed by Michael Soule, due to the shift in the top and middle management of the international conservation organizations, consist of economists, lawyers, and development specialists, instead of the biologists.
- Sampling of Raymond Bonner's conclusion been presented, depicting the African scenario and introducing the totemic species and the shift in the totemists views, as the new totemists insist on their species being the rightful inhabitant, and ask humans to go elsewhere, who have been co-existed with them from years.

AUTHORITARIAN ELEMENTS ASSERTING IDENTITY OF THE BIOLOGISTS

- Guha turns to the example of Nagarhole national park, home to about 6000 tribals, whom the state and the forest department wants out, citing them as the reason behind destruction of the forest and wild. Dr. John G. Robinson, a green missionary, suggest the only means to save the wilderness, is to throw the tribals out of the park. He further places an explanation, as the tribals compulsively hunt for food and compete with tigers for prey, which finally leads to the destruction and disharmony.
- These sorts of conflicts are placing everywhere, the Indian wildlifers have ganged up behind the forest department in order to expel and rehabilitate them far outside the forest. This process is irreversible, as the poor tribal, thrown out of his home by the propaganda of conservation, is condemned to life of an ecological refugee.

CONFLICT OF INTEREST

- There also exist some culturally sensitive biologists, who emphasized on the rights of the deprived communities who live in and around the protected areas, in programs of wildlife conservation. Guha further mention three such, writings of them, in 1949, 1977 and 1994, M.S. Randhawa, Salim Ali and Raman Sukumar respectively, in which they talked about the balance of power between various organisms, inclusive policy making backed with public opinion, stressing on the survival aspect, while, claiming it as both unjustified and unrealistic to expect only a certain section of society, the tribals and the marginal farmers, to bear the entire cost. Sukumar even placed some suggestive measures, like, if some proportion of the income derived from tourism is retained by the local economy there would be increased motivation for people to value wildlife and their habitats. He further advocate the need of direct management, and even selective culling of male elephants, who are inherently more predisposed to raiding crops, as it is causing no likely effect to the intrinsic rate of growth of the population.
- The present philosophy and practice of conservation is flawed in terms of scientific as well as social sense. Specifically, there are two axioms elucidating it further, the monumentalist belief that the only real wildness is big continuous wilderness, and the claim that all human intervention is bad for the retention of diversity. These axioms are simply prejudices, as evident through the studies, which shows that the highest levels of biological diversity are often found in areas with some intervention, and the same is far greater than the untouched areas.

- This argument further facilitated by the example of Ghana bird sanctuary in Bharatpur, where the villagers were forbade from exercising the traditional grazing rights. After the enforcement in consequent years, the population of the key Bird species declined in absence of cattle grazing, as it helps in keeping down the tall grass, which in turn, helps bird species forage for insects.

CLASSIFICATION STRATA

- Guha further propounds the personified instream classification, following the authoritarian biologist, the anthropocentric socialist, the pragmatic scientist and the democratic scientist. Authoritarian biologist and the anthropocentric socialist are like the two edges in a spectrum. The latter believe in prioritizing the interests of humans over animals, even gravely endangered one, whereas, the former believe in just the opposite. The difference between pragmatic and democratic scientist, is with regards to the scale of precedence and approach, where the latter inculcating ecumenical approach.

THE TIGER TASK FORCE AND PROJECT TIGER

- There has been a decline in number of tigers, and even no tiger had been spotted for weeks, in the several notified Project tiger sanctuaries, which certainly leads to the emergence of the Tiger Task force. As a result, rights of the Adivasis came into the frame, which was resolved by a new legislation, proposed by the Ministry of Tribal Affairs, providing exclusive rights to the community. The bill aimed at correcting all the historical injustice. It stirred up a storm of outrage among the wilderness lovers and protectionist. In this controversy, appears the famous spokesman for the tiger, Valmik Thapar.
- Guha, initially present his opinions and suggestions, like, tigers and human beings cannot coexist, then systematically dismantle and defy his arguments, by giving counter points against every opinion and theory, citing them as profoundly unhistorical, authoritarian and hypocritical. Towards the end, the report of the Tiger force, ask for the joint forest management and the inclusion of local communities in the management process.

PERSONAL REFLECTION

- Ramachandra Guha highlights the need of inclusive sustainable development, in which no sect should be sacrificed, in specific, everyone needs to co-operate and understand their responsibilities towards the environment, and no single entity or specific community is responsible for the destruction. The idea of dislodging tribals and rehabilitate them far outside the forest, mark its root from the western organizations, who has put Science's reputation and the dollar's influence behind the drive to push the initial forest owners out of their home.
- I even feel that a strategy that views forest dwellers and tribals, as rivals rather than allies, can only serves as a detrimental one. Thus, there is a need to flout the idea of the dominant wilderness fanaticism, which currently drives most of the policies. We hunted wild animals to extinction for the first time, and now we are the one, portraying ourselves as conservationists, and complaining that Adivasis are causing trouble.

CHAPTER 6

THE HISTORICAL SOCIAL ECOLOGY OF
LEWIS MUMFORD

INTRODUCTION

- Lewis Mumford was an American historian, sociologist, and a philosopher. In the early 1970s, as the Western environmental movement broke out, a young British journalist called Anne Chisholm published a book documenting scientists whose research received a fair hearing on the environmental situation. Although, Mumford doesn't have any formal training in ecology, but for Chisholm he was a genius with commendable research and had the most visible influence on contemporary environmental thought. Even for Guha, his ecological thoughts and work was worth admiring and far satisfactory, just the way Chisholm think.

MUMFORD'S ECOLOGICAL HISTORY AND THOUGHTS

- Guha invokes the reason behind the mention of Lewis Mumford in his work, as due to his rich understanding of human history and assertion of an inclusively relative ecological thought. He refused to disembed individual attitudes to nature from their social, cultural and historical contexts, like Muir, Leopold and others. He also acknowledged Patrick Geddes, who called the attention of Mumford to the life of George Perkins Marsh, the forgotten American conservationist. He was a source of inspiration for Mumford's work and it was Marsh who first introduced man as an active geological agent.

- Mumford presented his understanding in his essays on regionalism, which was published in *The Sociological Review*. He defined regionalism as the prospect for a more sustainable economy and culture. He warned that American economic growth could no longer continue to ignore regional realities as due to the pertaining edgy situation. He also elucidated the three crucial threats to the civilization: the continuing destruction of forest cover and soil erosion, the depletion of Irreplaceable mineral resources and the destructive potential of modern warfare.
- He introduced a three stage interpretation of the development of industrial civilization. The three successive phases are: eotechnic, paleotechnic and neotechnic. The eotechnic phase is water and wood complex, the paleotechnic is a coal and iron complex and the neotechnic is an electricity and iron complex. The eotechnic phase is the initial phase, which heavily relied on renewable resources, whereas, the paleotechnic phase is the era of carboniferous capitalism and a period of transition. The neotechnic phase is the emerging phase, relies on a non polluting source of energy, hydroelectricity, and is cited as the best phase, as it restore three vital equilibria: the equilibrium between humans and nature, between industry and agriculture and equilibrium in population and restore the nature and resources.

MUMFORD'S ENVIRONMENTAL PHILOSOPHY FROM THE SOCIAL COMMENTARY

- There was a sharp difference in his writing since the second world war, which sort of shattered all his hope and faith in this early approach. The optimism of Mumford's Ecological histories of the 1930s will surprise anyone acquainted only with his later writing. The reputation of Mumford based on his later writing as a prophet of Doom. The subtle difference might be seen because of the recurring events during the Second World War and the aftermath, which probably altered his belief in the forward movement of history.
- The chief effects of the regressive transformation were evident through the shift in his foundation viewpoint, from the indicative to the imperative mood, from we shall achieve a dynamic equilibrium to we must, if we are not to destroy the delicate ecological balance upon which all life depends.
- He believed that modern Science and Technology assimilate the impression of capitalism and the development of atomic energy and the perfection of weapon of mass destruction would undermine democracy by fostering secrecy by and within the state. Mumford's political approach and democratic visions are worth highlighting, as he stressed that citizens must have control over public programs that vitally affect their lives, also his high concern for folk or modern knowledge was stunning.

SHIFT IN SITUATION AND THOUGHT

- He had a deep pessimism about the direction of Western civilization, which is probably due to his only son's death, Geddes at the age of 19, in the Second World War. He also appreciated William Morris's work.
- Guha had nothing against Leopold, instead he admires his work. He further continues and cited the reasons and basis why should Lewis Mumford be considered as popular among American environmentalists as Muir and Leopold. He mentions their achievements and then systematically overshadowed their skills and understanding in front of Mumford. Then he quoted the reasons behind the long drawn neglect and ignorance. Mumford focused on the relative studies between cultural identities and biological diversities, whereas, the trend was of wilderness fanaticism and dominance of wild animals thinking in the American environmental movement. He was also a narrow nationalist, and his democratic front and political thoughts and beliefs could be cited as the reason behind the wider cultural denial of his thought within the country. He made contributions in various fields, which can make his personality as sort of polymath and multi-tasking, which might have lead to the ignorance and much appreciation of his work in this particular field.
- But as people who have gone through his work did understand the importance of his work, as correctly remarked by the German green, Rudolf Bahro, 'The work of Mumford has the same significance for the ecological movement as is the work of Marx once had for the labour movement.'

PERSONAL REFLECTION

- It's been decades since the emergence of the paleotechnic phase and as Mumford mentioned the automatic smooth process, there isn't one left. The burden of which is shifting towards the communities living within, leading to the wilderness fanaticism and blind love towards wild. It is for the first time in human history, societies were living not on current income from nature but on nature's capital. Thus, we need to understand our responsibilities at the same time towards the real owner. Whatever we have doesn't belong to us, we are living on a debt, and we need to pay it for once and all.
- The survival instinct has been shift on the dependency of beings on machinery and extraction of resources, which has to be interpreted fairly. For survival the myth of the machine has to be replaced with 'a new myth of life', a myth based upon a richer and wider understanding of all organic processes.

CHAPTER 7

THE SUBALTERN SOCIAL ECOLOGY OF
CHANDI PRASAD BHATT

THEMES IN THE TEXT

- In this chapter Guha seeks to pay tribute to Chandi Prasad Bhatt who is known as the founder of the Chipko Movement.
- Guha talks about Bahuguna, who was a politician, he also once fought election against the a nominee of the congress party. Bahuguna had also once been a Congress chief minister of UP as well as national secretary of India's leading political party.
- Between 1956 -1960 Chandi Prasad Bhatt spent his life learning about sarvodya from Rawat, and his wife Sashi Behn had been trained by the legendary as Sarla Behn as social worker at Lakshmi ashram at Kasauni. In 1964 was founder Of the Dashouli Swarajya seva sangh which was called as the mother organization of the chipko movement. Later they moved eastward to kumon where the protests against commercial forestry where the movements led by Sunderlal Bahuguna and his associates.

- Bahuguna's essay were printed in, Yugani in May and June 1974. SN Prasad conducted study of the Indian Institute of science in 1984.
- In the early 1980's the DGSS become the DGSM, with Mandal replacing Sangh. He also quoted to low caste members of DGSM committee. Murrari Lal added to the fact that Bhatt Ji fought bigger battles for removals of social inequalities existing across.
- Unfortunately, Bhatt has little time to let people know about wisdom he has gained overtime. In September 2001 Bhatt spoke in Missouri at the house of P. Srinivasa. Bhatt was the first person who taught Indians About environmentalists, and their contribution towards protecting and safeguarding the environment, and its subsystems.

CHAPTER 8

THE DEMOCRATIC SOCIAL ECOLOGY OF
MADHAV GADGIL

BACKGROUND

- Madhav Gadgil was the son of Dhananjaye Ramachandra Gadgil who was a famous Economist, Sociologist and Institution Builder. He founded the Gokhale Institute of Politics and Economics. He studied at Cambridge and his key areas included the Industrial Revolution, Economic Policy and Business Communities Sociology. Ramachandra Gadgil invited Wassily Leontief who was a famous economist and after hearing his advice Ramachandra Gadgil decided to orient Madhav away from the field of economics. Subsequently, Ramachandra also had a personal interest in nature and was also a subscriber to Journal of Bombay Nature History Society. As a reason, Madhav Gadgil also got oriented to nature
- Madhav Gadgil was born in Pune in the area of Western Ghats: Sahyadri Mountains. Madhav Gadgil did his BA in Science then MA in Sociology and lastly a PhD in Ecology from Harvard. At Harvard, Madhav's key influence was E.O Wilson. Madhav also got married while he was at Harvard.

GADGIL'S WORK IN 1970s

- In 1971 he returned to Pune and joined Maharashtra Association for the Cultivation of Science. He did his fieldwork in the Western Ghats on the indigenous forest of peasants that the forest department wanted to acquire. Later Madhav explored the Sacred groves that remained and saw them as indigenous conservation that was rich in plant and animal diversity.
- In 1973 the IISC offered Madhav and his wife a position. When they joined a new department was created 'The Centre for Appropriate Science and Technology for Rural Areas' (ASTRA). ASTRA was involved in environmental technologies creation and studies on biomass flow of energy etc., while also looking at sociological dimensions within villages.
- Gadgil in Pune worked with Kailash Malhotra on the study of the pastoralist. The study was an understanding of human ecology and foraging strategies of shepherd and herders. The study revealed that different endogamous groups living in the same area minimize competition due to resource division and exclusion. They infused fields of Ecology and Anthropology and followed fieldwork.

GADGIL'S WORK IN 1980s

- In 1980 Gadgil and Kailash Malhotra surveyed major environmental problems facing in India. Their study focused on peasants, pastoralist and fisherfolk. They visited the Western Ghats, Himalaya, Rajasthan Desert, Central Forest and Deccan Farmlands.
- They found over-commercialisation of resources and suggested democratization of natural resource management by local communities and assessment of large development projects by a Techno-Enviro-Socio-economic perspective. He also studied how Bamboo was supplied by the state to paper mills at subsidised rates while weavers bought it for huge prices.
- Gadgil had three major claims on forests:
 - 1) Ecology
 - 2) Equity
 - 3) Efficiency

- In 1982 he wrote a 37-page document: “An Indian Conservation Strategy” that sorted biodiversity conservation with social justice. He noted that India has done little to sustain its biological heritage and lost a greater proportion than any other landmass comparable. To make of what is left; Gadgil suggested reorienting our choices of protected communities to achieve max preservation of overall biodiversity.
- 1987-88 a coalition of NGOs hosted ‘Save the Western Ghats’ march. In November 1987 the march started from Nawapur and ended in Goa. Gadgil spent weeks on the march and presented a paper on ecology and biodiversity of Western Ghats. Gadgil also created a follow up with an action plan for the marchers. He Outlined 13 specific programs covering both ecological and social objectives. Gadgil approach was inclusive of all cross-sections of the society. He suggested the formation of groups called ‘Paschimadi Parisar Samudaya’ for sustainable development of Western Ghats. Aiming to work on a range of institutions like schools, colleges, local representatives. Majority of marchers didn’t follow his approach.

GADGIL'S WORK IN 1990s

- The third stage of his work was an integration of the first two. The orthodox approach Gadgil said was flawed in an ecological and social sense. Wildlife managers were endowed coercive power and locals should be employed with more power and resources.
- Gadgil contributed heavily to the biodiversity debates of the 1990s and later helped WTO Negotiations and the Convention of Biodiversity. Gadgil popularised the notion of “People's Biodiversity Registers”. Guha says no scientist has done as much as Gadgil to democratize the idea of biodiversity conversation.
- Guha found a paper with Gadgil that was an unpublished Activist Document. It was written in 1989 in the backdrop of Congress defeat in the general elections, as congress was accused of corruption, less industrial focused and authoritarian rule. Congress got replaced by National Front that was a coalition government. The paper drew from 10 years of Guha experience and 20 years of Gadgil experience.

ACTIVIST DOCUMENT: 'ECOLOGY FOR THE PEOPLE' (NOVEMBER 1989)

- Gadgil noted that India stood at a crossroads, as people voted for a change in the country. There was a search for an alternative path to development, which is sustainable and would reverse the current. A common national consensus on the alternative strategy was there. It included Decentralisation decision-making, rural employment, open/accountable governance. These areas had implications for environmentalists and were oriented towards minorities.
- Acknowledgement of the right of all citizens, transparency in development programmes, non-elite decision making, defence programmes involving rehabilitation and Socio-environmental benefit-cost analysis of all development projects. Such an open system should characterise all other government programmes at all scales. Thus decision making inclusive of people from local communities and for organised work due to wages and records should be public.
- Lastly, the government at the local village level should focus on indigenous resource management. An organised right to work programme should be devised in villages. Common lands and water should be regulated and properly distributed. In the Panchayati Raj institutions, a new framework should be brought up for authority and regulation of common resources. The responses to the document were varied as some immediately followed the document others being extremely critical. But the whole process went wasted as National front didn't adopt the Alternative Development Agenda as the Mandal Commission Report was implemented instead.

DISTINGUISHING FEATURES OF GADGIL'S WORK AND HIS CRITICISM

- Deep knowledge of the land and its people. As in the Field trip of Guha and Gadgil, Gadgil easily identified locations photographed by botanist Cecil Saldanha of Siddapur. Gadgil also travelled extensively throughout rural India. Gadgil is intellectually original which is manifested in his work in the analysis of different societies in terms of their mode of resource use. Gadgil opposed and didn't follow the populous intellectual fashion. Evident by him being one of the first ones to do field research in India. He was also one of the first ones to recognise that blind opposition to market will help inefficient producers and an undemocratic state. Gadgil had a unity between Intellectual and Practical Agendas in his environmental research. As he was both a scientist and a practical social reformer.
- Gadgil had deep democratic instincts, which he applied socially. He always promoted political decentralisation, transparency in governance and freedom of information. Gadgil had an absence of Cynicism. As he was constantly motivated to work and learn and solve problems of society.
- From a critical standpoint, the chapter does discuss some of Gadgil's constructive points, but those points are stated as a matter of self-evident facts without due diligence or research behind them. Moreover, Gadgil hasn't written enough work and books. The reason was the cultural landscape of India which is more oral than written and Gadgil was also a public intellectual engaged in Social activism or reform. Also, much of his work is hidden away in fugitive documents rather than being published.

CHAPTER 9

HOW MUCH SHOULD A PERSON
CONSUME?

THEMES IN THE TEXT

- Guha in this chapter has walked us through the consumption patterns and processes from the west to the east. He quotes various thinkers and their work to put forward his case.
- Galbraith termed America in the 1950's as the most "affluent society" he meant not only that this was a society in which most people were hugely prosperous when reckoned against other societies and other times, but also that this was a society so dedicated to affluence that the possession and consumption of material goods was its exclusive standard of individual and collective achievement. And anything that restricted that achievement or something that hindered the development was highly condemned.
- Various American scholars talked about the squabble between the public and the private and how instead of social welfare the attention and finances were being transferred to private in the name of development. Later on the concern shifted to the long term consequences of collective promotion of consumption.
- He remarked that the American conservation movement had certainly noted massive exploitation of resources in the post-war period. However, its response was to look for more efficient methods of extraction, for the substitution of one material for another through technological innovation. There was a noticeable "selectivity in the conservationist's approach to materials consumption".

- Two major reason for silence on consumption by John Kenneth Galbraith were:
 1. Ideological, the worship of the great God Growth. The principle of Growth was a cardinal belief among the American people, this necessarily implied a continuous increase in the production of consumer goods.
 2. Political widespread skepticism of the state. For America in the 1950's had witnessed the resurgence of a notably oversimplified view of economic life which ascribed a magical automatism to the price system.
- Consumption continued the great unasked question of the conservation movement. The conservation movement focused principally on two things: threats to human health posed by pollution, and threats to wild species and wild habitats posed by economic expansion.
- The dominance of wilderness protection in American environmentalism has from the start promoted an essentially negative agenda, namely the protection of parks and their animals by freeing them of human habitation and productive activities. Historian Samuel Hays pointed out that the natural environment that was being put off as "useless" was now being developed to fulfil human wants and needs and played an advanced role in the consumer society.
- While saving these islands of biodiversity, environmentalists paid scant attention to what was happening outside, as in the American economy as a whole, since the energy and material consumption continued to rise. Selective environmentalism was widely criticized by Wendall Berry in his view " conservation is going to prove increasingly futile and increasingly meaningless if its proscriptions and forbidding's are not positively answered by an economy that rewards and enforces good use of resources responsibly." He was convinced that "the wilderness cannot survive by any means, if our economy does not change for the better".

- Gandhi's critique on western industrialization has had profound implications for the way we live and relate to the environment today. For him the distinguishing characteristic of modern civilization is an indefinite multiplicity of wants whereas, the ancient civilizations were marked by an imperative restriction and a strict regulating of these wants. He outrightly criticized the western way of going to the ends of the Earth for their satisfaction i.e. for resources.
- Gandhi's code of voluntary simplicity offered a sustainable alternative to modern lifestyles. One of his best sayings is as follows– the world has enough for everybody's need, but not for everybody's greed— this was an environmental ethic that he himself practiced and actively promoted.
- India is in many ways an ecological disaster zone, marked by high rates of deforestation, species loss, land degradation, and air and water pollution. Consequences of which are borne by the poor, peasants, tribal, fisherfolk, etc. who have had their resources snatched away or depleted by powerful economic interests. Over the past few decades India has attempted to transform India like the west without access to resources and markets like the west India has had to rely on exploiting its own people and environment. The natural resources have been used to meet the needs of the urban-industrial sector, the diversion of forests water, minerals and so on to the elite has accelerated the process of environmental degradation.
- Analytic framework that explains the asymmetries in patterns of consumption. This model rests on the fundamental opposition between two groups termed as *Omnivores* and *ecosystem people*. Omnivores, who include industrialists, rich farmers, state officials, and the growing middle class based in cities, have the capability of drawing upon the natural resources of the whole of India to maintain their lifestyles.
- Ecosystem people, include roughly two-third of the rural population or about 400 million people – rely for the most part on the resources of their own vicinity, from a catchment of a few dozen square miles at best. These are various resource-dependent communities surviving in an increasingly postmodern landscape.

CENTRAL FEATURES OF DEVELOPMENT PROCESS

1. Development is a process
2. Development is a continuous process
3. Development is a gradual process
4. Development is a sequential process
5. Development is a cumulative process

PROSPECTS FOR FUTURE

1. Introduction

2. The current state of the world

3. The challenges we face

4. The opportunities we have

5. The path forward

- The fallacy of the romantic environmentalist – the fallacy holds that ecosystem people want to remain ecosystem people. The fallacy comes in 2 versions: the agrarian and the primitivist or deep ecological.
- Thinkers like Gandhi always promoted the development of the villages and critiqued the idea of cities and industrialization. Gandhi believed that the village should be mirror of the country. Environmentalists like Medha Patkar, Sunderlal Bahuguna saw cities as polluting morally as well as ecologically. The opportunities and commodities provided by the city were seen as something that was not associated with a good life. The peasant must remain a peasant; indeed they would say, he wants to remain a peasant.
- The ecosystem person of the deep ecological vision is more likely to be a hunter-gatherer than a subsistence farmer. Still, like the agrarian, the committed deep ecologist is resolutely opposed to the artifacts of modernity whether technological, social or aesthetic. Many environmentalists imply that development is nasty imposition on the innocent peasant and tribal.
- It is impossible to create a world peopled entirely by omnivores, it is equally fallacious to suppose that the ecosystem people want to remain as they are and do not want to massively enhance their own resource consumption. There is always a need to achieve more and advanced commodities among not just the deprived, rather all groups of people across.

GREEN DEVELOPMENT IN INDIAN CONTEXT

- Six central elements of green development in Indian context:
 1. A move toward a genuinely participatory democracy with a strengthening of the institutions of local governance at village, town and district levels.
 2. The creation of a process of natural resources use which is open accessible and accountable. Which would centre around an act enabling citizens to be better informed about the designs of the state and making officials more responsive to the public.
 3. Greater political decentralization to stop widespread under-valuation of natural resources. The removal of subsidies and putting of a proper price to make resource use more efficient and less destructive of the environment.
 4. Encouraging shift to private enterprise for producing goods and services while making sure that there are no hidden subsidies and the firm properly internalizes the externalities.
 5. Outline sustainable policies for specific resource sectors.
 6. This development model if India becomes a far equitable society than it is at present. Three key ways of enhancing the social power of ecological refugees and ecosystem people are land reform, literacy and proper health care. This would also help in controlling the problem of population growth.

CONCLUDING OBSERVATIONS

- Through the course of the book, we can observe that Ramachandra Guha engages with various tenets of the environment movement, ranging from forestry and wildlife, to metrics that need to be adopted in order to ensure sustainability of resources. The book can be seen as a comprehensive one due to various reasons. At the very outset, Guha manages to capture something important- the way individuals engage with the environment and its subsystems has a lot to do with their socio-cultural context. For example, while an individual living in an urban region might not out rightly understand the importance of the environment; for an individual belonging to a rural community, environmental interaction is an intricate part of life- their interdependent relationship subsystems such as forests, rivers etc. makes them acknowledge its importance.
- Secondly, Guha acknowledges his own journey as an environmental historian- of his learnings over time, and goes on to critically analyse the environment movement- what it has achieved so far, and the shortcomings that need to be on priority addressed. He first critiques traditional environmentalists such as Muir who have looked at the problem of environmental degradation from an individualistic lens, and have largely ignored socio-cultural context of individuals. He goes on to talk about how the environmental movement has evolved over time, and has become more inclusive. He acknowledges the contribution of environmentalists such as Madhav Gadgil, Lewis Mumford, Chandi Prasad Bhatt etc. in ensuring sustenance of the movement, and in making it more encompassing in nature- including all diverse issues, pertinent to the movement.
- Thirdly, Guha talks about the aspects the environment movement needs to address from a long-term standpoint. He says the fundamental problem lies in consumerism, and the unquenchable aspect of it- the constant want of individuals to consume as many products as possible, accumulates into wastage, and subsequent processes (by industries in producing those goods) that affect the environment. Guha talks about the need for policy change, into a comprehensive one. He argues that this is only possible through political decentralisation, democratising the system by involving people from diverse perspectives in forming policy, and pushing for greater accountability on consumption of resources and actions of corporations. We can therefore conclude that the process of sustainable development can be accomplished, only by creating a level-playing field for all groups of people, and ensuring equity for all, in terms of how policy impacts them and their surrounding environment, and the extent to which they were involved in forming that decision.

THANK YOU!